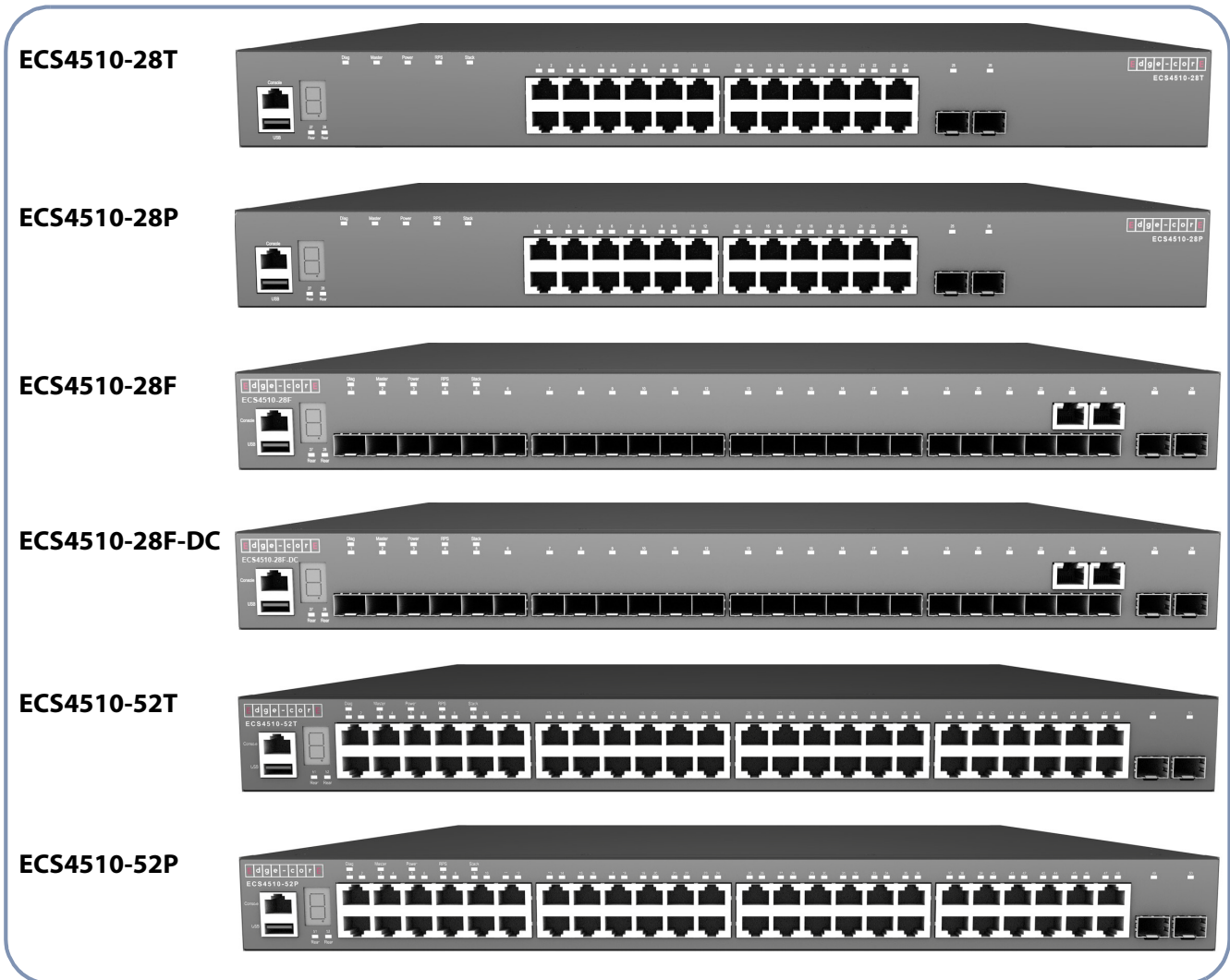Edge-corE®

Quick Start Guide

28/52-Port L2+ Stackable Gigabit Ethernet Switch

ECS4510-28T / ECS4510-28P / ECS4510-28F / ECS4510-28F-DC
ECS4510-52T / ECS4510-52P

The ECS4510-28T, ECS4510-28P, ECS4510-52T, and ECS4510-52P are stackable Layer 2+ switches that provide 24/48 10/100/1000BASE-T RJ-45 ports, and two 10 Gigabit (10G) Small Form Factor Pluggable Plus (SFP+) slots that support 1G and 10G transceivers. The ECS4510-28F and ECS4510-28F-DC are Layer 2+ switches that provide 22 SFP 1G transceiver slots, two combination Gigabit RJ-45/SFP ports, and two 10G SFP+ slots. The ECS4510-28P and ECS4510-52P also provide Power-over-Ethernet Plus (PoE+) capability on the RJ-45 ports.

All switches also provide one rear-panel slot for a dual-port 10G hot-swappable expansion module.

ECS4510-28T

ECS4510-28P

ECS4510-28F

ECS4510-28F-DC

ECS4510-52T

ECS4510-52P

www.edge-core.com

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> (i) **Note:** For detailed switch installation information, refer to the *Installation Guide*, which is on the Documentation CD included with the switch.
>
> **Note:** For Safety and Regulatory information, refer to the *Safety and Regulatory Information* document included with the switch.

1. Unpack the Switch   Unpack the switch and check the package contents.

- ◆ L2 Stackable Gigabit Ethernet Switch
  ECS4510-28T, ECS4510-28P, ECS4510-28F, ECS4510-28F-DC, ECS4510-52T, or ECS4510-52P
- ◆ Rack Mounting Kit — includes two brackets and eight screws
- ◆ Four adhesive foot pads
- ◆ DC connector plug (ECS4510-28F-DC only)
- ◆ Power cord — either US, Continental Europe or UK
- ◆ Console cable (RJ-45 to DB-9)
- ◆ Documentation — *Quick Start Guide* and *Regulatory and Safety Information*
- ◆ Documentation CD—includes *Installation Guide, Web Management Guide,* and *CLI Reference Guide*

2. Install the Switch   The switch can be mounted in a standard 19-inch rack or on a desktop or shelf.

Following your rack plan, mark the holes in the rack where the switch will be installed. Lift the switch into the rack and hold it in a position aligned with the marked holes. Secure the switch in the rack, using four rack-mounting screws (not provided).
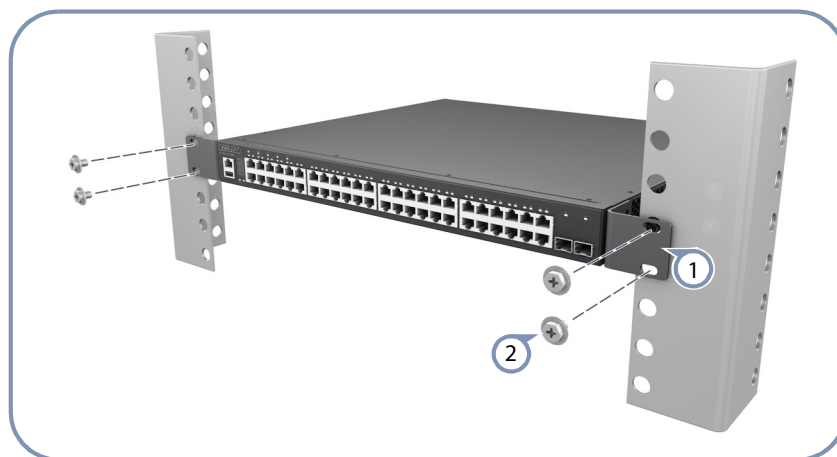
(1) Attach the brackets to the switch.

(2) Use the screws supplied with the rack to secure the switch in the rack.

3. Ground the Switch Before powering on the switch, ground the switch to earth.

Ensure the rack on which the switch is to be mounted is properly grounded and in compliance with ETSI ETS 300 253. Verify that there is a good electrical connection to the grounding point on the rack (no paint or isolating surface treatment.).

⚠️ **Caution:** The earth connection must not be removed unless all supply connections have been disconnected
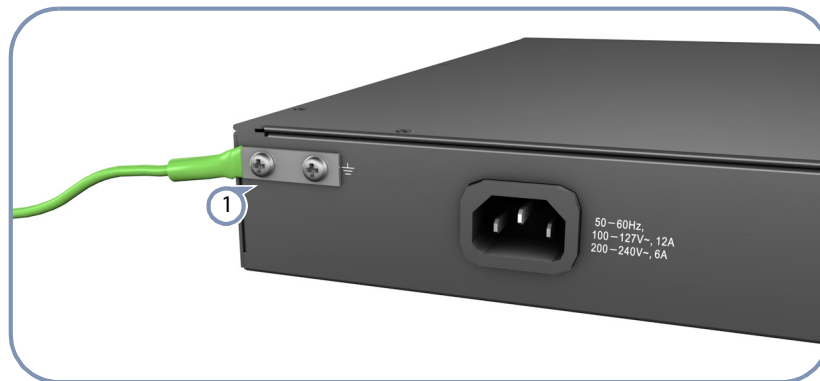
① Connect a grounding wire and lug to the dual-hole grounding point on the switch rear panel, then to rack ground.

4. Connect the Power For the AC models , connect the switch to an AC power source that can provide the following:

◆ ECS4510-28T: 100 to 240 V, 50-60 Hz, 1.5 A
◆ ECS4510-28P: 100 to 240 V, 50-60 Hz, 10 A
◆ ECS4510-28F: 100 to 240 V, 50-60 Hz, 2 A
◆ ECS4510-52T: 100-240 VAC, 50-60 Hz, 2 A
◆ ECS4510-52P: 50-60 Hz; 100-127 VAC, 12 A; 200-240 VAC, 6 A

⚠️ **Caution:** Before connecting the switch to AC power, the grounding terminal screw, on the switch rear panel, must be permanently connected to earth.
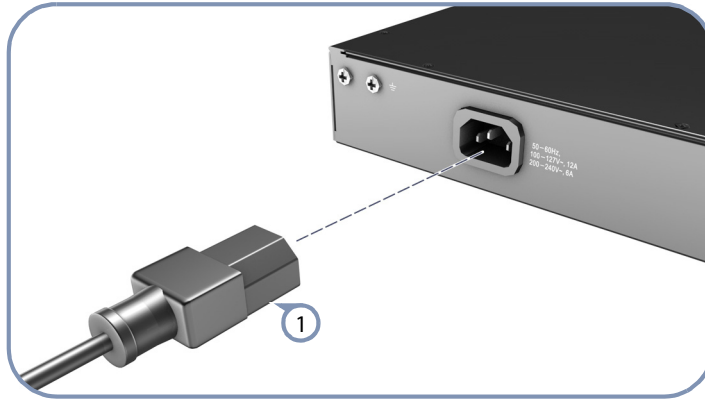
① Plug the AC power cord into the socket on the rear of the switch.

If you have purchased an optional Redundant Power Supply for use with the ECS4510-52P, connect it to the switch and to an AC power source now, following the instructions included with the package.

ⓘ **Note:** The ECS4510-52P maximum power consumption is reduced to 780 W when the device is powered from a connected RPS.

For the ECS4510-28F-DC, use the included DC power cable to connect the switch to a DC power source that can provide 36 to 75 VDC, 3.82 A.

Before connecting the DC plug to the switch, connect the open DC cable wires to the DC power source as follows:

◆   VDC (blue wire)

◆   VDC Return (brown wire)

◆   Chassis Ground (yellow-green wire)

⚠ **Caution:** Before connecting the switch to DC power, the grounding terminal screw, on the switch rear panel, must be permanently connected to earth.
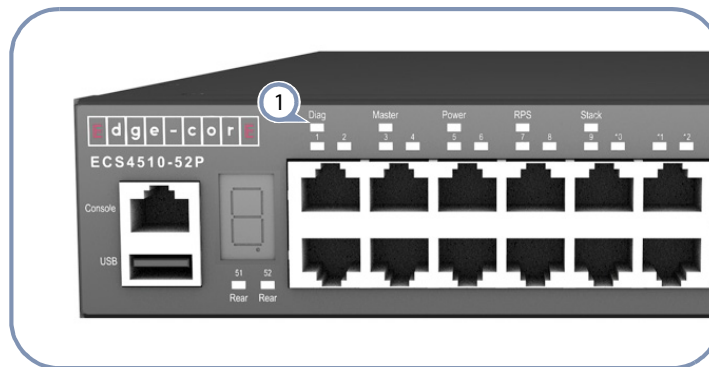
① Plug the DC power cable into the socket on the rear of the switch.

5. Verify Switch Operation

Verify basic switch operation by checking the system LEDs.

When operating normally, the Diag and Power LEDs should both be on green.


① System Status LEDs.

6. Make Initial Configuration Changes

At this point you may need to make a few basic switch configuration changes before connecting to the network. It is suggested to connect to the switch console port to perform this task.

The serial port's configuration requirements are as follows: 115200 bps, 8 characters, no parity, one stop bit, 8 data bits, and no flow control.

You can log in to the command-line interface (CLI) using default settings: User "admin" with password "admin".
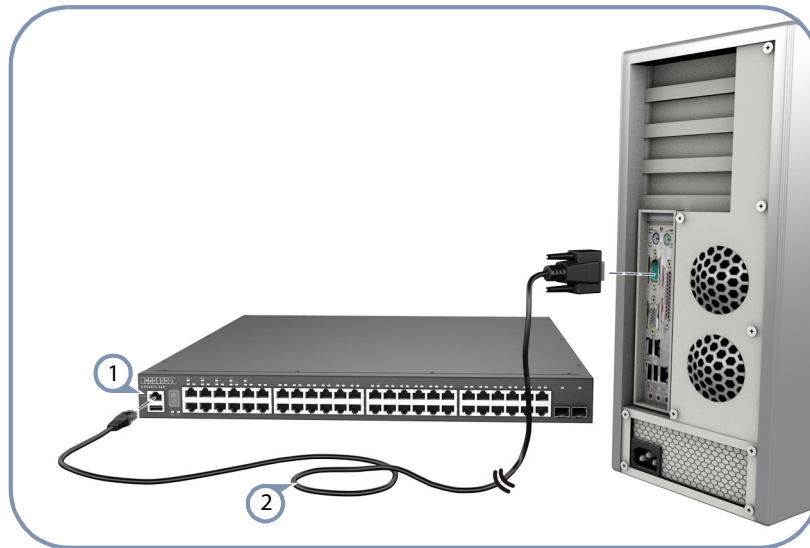
① Console Port.
② Console Cable.

For information on initial switch configuration, refer to the *CLI Reference Guide*.

7. Connect Network Cables

Install SFP/SFP+ transceivers and connect network cables to port interfaces:

◆ For RJ-45 ports, use 100-ohm Category 5, 5e or better twisted-pair cable for 1000BASE-T connections, Category 5 or better for 100BASE-TX connections, and Category 3 or better for 10BASE-T connections.

◆ First install SFP/SFP+ transceivers and then connect fiber optic cabling to the transceiver ports. The following transceivers are supported:

  ■ 1000BASE-SX (ET4201-SX)
  ■ 1000BASE-LX (ET4201-LX)
  ■ 1000BASE-ZX (ET4201-ZX)
  ■ 10GBASE-SR (ET5402-SR)
  ■ 10GBASE-LR (ET5402-LR)
  ■ 10GBASE-ER (ET5402-ER)

As connections are made, check the port status LEDs to be sure the links are valid.
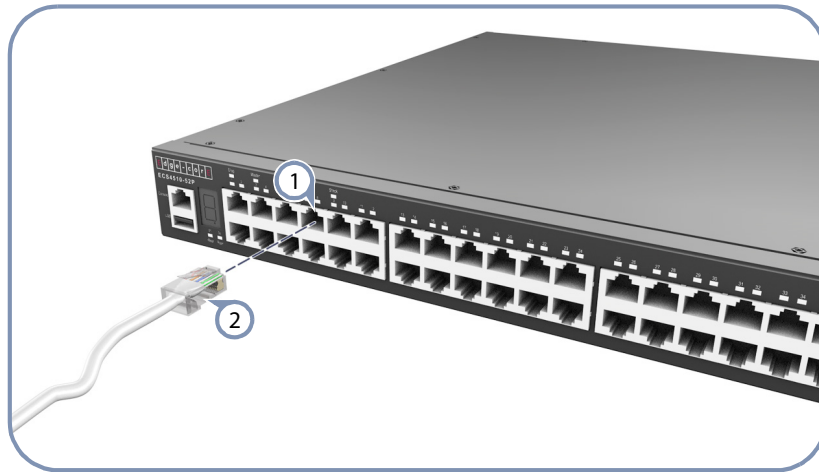
① 10/100/1000BASE-T RJ-45 Port.

② Twisted-pair Cable with RJ-45 Plug.

Software Release Notice

For ECS4510-28F-DC configuration, refer to the revised version of the *Management Guide* at the following link:

www.edge-core.com/DownDtl.asp?sno=CGMIDK&c=B

Hardware Specifications

Item	Specification
Chassis Specifications	
Size (W x D x H)	ECS4510-28T/P/F: 44.0 x 31.5 x 4.4 cm (17.3 x 12.4 x 1.7 in.) ECS4510-52T/P: 44.0 x 39.1 x 4.4 cm (17.3 x 15.4 x 1.7 in.)
Weight	ECS4510-28T: 3.7 kg (8.16 lb) ECS4510-28P: 4.95 kg (10.91 lb) ECS4510-28F/F-DC: 3.8 kg (8.38 lb) ECS4510-52T: 4.8 kg (10.52 lb) ECS4510-52P: 6.58 kg (14.51 lb)
Temperature	Operating: 0° C to 45° C (32° F to 113° F) Storage: -40° C to 70° C (-40° F to 158° F)
Humidity	Operating: 10% to 90% (non-condensing)
Power Specifications*	
AC Input Power	ECS4510-28T: 100 to 240 V, 50-60 Hz, 1.5 A ECS4510-28P: 100 to 240 V, 50-60 Hz, 10 A ECS4510-28F: 100 to 240 V, 50-60 Hz, 2 A ECS4510-52T: 100 to 240 VAC, 50-60 Hz, 2 A ECS4510-52P: 100 to127 VAC, 12A, 200 to 240 VAC, 6 A, 50-60 Hz
DC Input Power	ECS4510-28F-DC: 36 to 75V, 3.82 A
Power Consumption	ECS4510-28T: 35 W max. (with one expansion module) ECS4510-28P: 515 W max. (with one expansion module) ECS4510-28P Max. PoE Load: 410 W ECS4510-28F/F-DC: 50 W max. (with one expansion module) ECS4510-52T: 70 W (with one expansion module) ECS4510-52P: 960 W (with one expansion module and PoE enabled) ECS4510-52P maximum power consumption is reduced to 780 W when the device is powered from a connected RPS.
Redundant Power Supply (This accessory and specifications only apply to the ECS4510-52P.)	
Input Power	100 to 240 VAC, 50-60 Hz, 12 A
Output Power	12 VDC, 10.5 A, -54.5 VDC, 14.3 A
Regulatory Compliances	
Emissions	CE Mark: EN 55022, Class A FCC Class A EN 61000-3-2/3 VCCI Class A BSMI (ECS4510-28T/ECS4510-52T/ECS4510-28F/ECS4510-28F-DC)
Immunity	EN 61000-4-2/3/4/5/6/8/11
Safety	UL 60950-1 & CSA 60950-1 IEC 60950-1 & EN 60950-1 CNS14336-1 (ECS4510-28T/ECS4510-52T/ECS4510-28F/ECS4510-28F-DC)

* Maximum power consumption values are measured under a 100 percent loading test and should be used as estimates for planning purposes.